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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/781,643	02/20/2004	Charles R. Harrold	737-239	3453
23117	7590	12/16/2005	EXAMINER	
NIXON & VANDERHYE, PC 901 NORTH GLEBE ROAD, 11TH FLOOR ARLINGTON, VA 22203			BOCHNA, DAVID	
			ART UNIT	PAPER NUMBER
			3679	
DATE MAILED: 12/16/2005				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/781,643	HARROLD, CHARLES R.	
	Examiner	Art Unit	
	David E. Bochna	3679	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 September 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) 20-29 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9, 11-15, 18 and 19 is/are rejected.
- 7) ☒ Claim(s) 10, 16 and 17 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. Claims 20-29 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected apparatus, there being no allowable generic or linking claim.

Election was made **without** traverse in the reply filed on 9/23/05.

Specification

2. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

The abstract should be shortened to at least 150 words.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-2, 5, 8 and 12-15 are rejected under 35 U.S.C. 102(b) as being anticipated by Sayre.

In regard to claim 1, Sayre discloses a process for installing a plastic connector bushing in a plastic water supply tube comprising:

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- a) cutting a hole of predetermined diameter in said water supply tube 60;
- b) locating the connector bushing 32 in the hole, the connector bushing having an upper radial flange 36, and wherein a metal washer (fig. 8) is interposed between an underside of the radial flange and an area of the water supply tube surrounding the hole; and
- c) applying energy to the metal washer sufficient to cause melting respective facing surface portions of the radial flange and water supply tube to thereby form a bonded joint between the connector bushing and the water supply tube.

In regard to claim 2, the connector bushing and water supply tube are constructed of polyethylene.

In regard to claim 5, the energy applied in step c) is in the form of an electromagnetic field.

In regard to claim 8, including applying pressure to the bonded joint.

In regard to claim 12, further installing a tubular supply line 86 or riser connector in the connector bushing 32.

In regard to claims 13 and 14, the connector bushing is formed with a tapered through-bore 32.

In regard to claim 15, the riser connector 60 has a correspondingly tapered exterior surface for engagement with the tapered through-bore.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

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having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 3 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sayre.

In regard to claim 3, Sayre discloses that the metal washer is constructed of a steel wire mesh, but not stainless steel. However, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to make the steel washer out of stainless steel because the selection of a known material based upon its suitability for the intended use is a design consideration within the skill of the art. In re Leshin, 227 F.2d 197, 125 USPQ 416 (CCPA 1960).

In regard to claim 11, Sayre is silent as to the diameter size of the metal washer. However, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to make the diameter of the washer about .75 inches because a change in the size of a prior art device is a design consideration within the skill of the art. In re Rose, 220 F.2d 459, 105 USPQ 237 (CCPA 1955).

7. Claims 1-2, 4, 6-9, 12-15 and 18-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Evans in view of Vogel et al.

In regard to claim 1, Evans discloses a process for installing a plastic connector bushing in a plastic water supply tube comprising:

- a) cutting a hole 18 of predetermined diameter in said water supply tube;
- b) the connector bushing having an upper radial flange 16, and wherein a metal washer 22 is interposed between an underside of the radial flange and an area of the water supply tube surrounding the hole; and
- c) applying energy to the metal washer sufficient to cause melting respective facing

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surface portions of the radial flange and water supply tube to thereby form a bonded joint between the connector bushing and the water supply tube. Evans teaches making a secure saddle connection between a hose 12 and bushing 14, but Evans does not disclose a portion of the bushing being located within the hole of the water supply tube. Evans teaches attaching a bushing to a tube where the bushing has a portion 56 located within the hole in order to make a more secure between the hose and bushing. Therefore it would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify the bushing of Evans to include a portion engaged within the hole of the pipe, order to improve upon the strength of the pipe connection.

In regard to claim 2, Evans discloses a supply line constructed of plastic, but not specifically polyethylene. However, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to make the pipe out of polyethylene because the selection of a known material based upon its suitability for the intended use is a design consideration within the skill of the art. In re Leshin, 227 F.2d 197, 125 USPQ 416 (CCPA 1960).

In regard to claim 4, the energy applied in step c) is in the form of RF energy.

In regard to claims 6 and 7, the energy applied in step c) is in the form of resistance heating generated by a DC battery.

In regard to claim 8, including applying pressure to the bonded joint.

In regard to claim 9, the metal washer is formed with a pair of outwardly extending tabs 24, 26 for facilitating application of energy in step c).

In regard to claim 12, further installing a tubular supply line or riser connector in the connector bushing.

In regard to claims 13-15 the connector bushing and riser connector do not have a tapered through-bore, but it would have been obvious to a person having ordinary skill in the art at the time the invention was made to make the through bores tapered because a change in the shape of a prior art device is a design consideration within the skill of the art. In re Dailey, 357 F.2d 669, 149 USPQ 47 (CCPA 1966).

In regard to claims 18-19 the connector 14 is longitudinal, but it would have been obvious to make the connector have a 90 degree bend or a T because substituting bends and Ts in place of longitudinal pipe or adding bends and Ts to the end of longitudinal pipe is common and well known in the art. In addition, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to make the connector with a bend or T because a change in the shape of a prior art device is a design consideration within the skill of the art. In re Dailey, 357 F.2d 669, 149 USPQ 47 (CCPA 1966).

Allowable Subject Matter

8. Claims 10 and 16-17 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Schulte-Ladbeck et al., Miller, McMillan et al., Ewen et al., Savko, Gould et al., Pedlow et al., and Caldwell all disclose similar couplings common in the art.

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10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to David E. Bochna whose telephone number is (571) 272-7078. The examiner can normally be reached on 8-5:30 Monday-Thursday and every other Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel P. Stodola can be reached on (571) 272-7087. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in dark ink, appearing to read "David Bochna", with a long horizontal flourish extending to the right.

David E. Bochna
Primary Examiner
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